

derivative has part or all of the amino acid sequence of Fig. 10.

- Sub
A1
cont
5. (Amended) A cancer vaccine according to [any preceding] claim 1 wherein the [antigen,] polypeptide, fragment or derivative includes part or all of the amino acid sequence consisting of amino acids 97-159 of Fig. 10.

6. (Amended) A cancer vaccine according to claim 5 wherein the [antigen,] polypeptide, fragment or derivative includes a sequence having at least five amino acids identical with corresponding amino acids of a contiguous stretch of seven amino acids contained within amino acids 121-128 or 151-158 of Fig.10.

- 7 (Amended) A cancer vaccine according to [any preceding] claim 1 wherein the [antigen,] polypeptide, fragment or derivative includes a sequence having at least six amino acids identical with corresponding amino acids of a contiguous stretch of nine amino acids contained within amino acids 83-93 of Fig. 10.

8. (Amended) A cancer vaccine according to [any preceding] claim 1 comprising a fragment of at least five contiguous amino acids from a polypeptide of the CD55 family.

Sub A²
10. (Amended) A cancer vaccine according to [claim 8 or] claim 9 wherein the fragment is of at least seven contiguous amino acids.

Sub A³
C⁴
13. (Amended) A cancer vaccine comprising a nucleic acid molecule which encodes [an antigen,] a polypeptide, fragment or derivative as specified in [any preceding] claim 1 wherein the vaccine is capable of inducing an immune response in a patient.

Sub A⁴
15. (Amended) A cancer vaccine according to [any preceding] claim 13 wherein the immune response is one or more of a T-helper cell response, a cytotoxic T-cell response and a NK cell response.

Sub A⁵
16. (Amended) A cancer vaccine according to [any preceding] claim 1 which is capable of inducing an immune response against CD55 or 791gp72 as expressed by cancer cells.

Sub A⁵
Sub A⁶
19. (Amended) A method of treating a patient having cancer, the method comprising administering to the patient a therapeutically effective amount of a cancer vaccine as defined in [any one of claims 1 to 17] claim 1.

Sub A⁶
22. (Amended) Isolated and purified 791Tgp72 antigen according to claim 20 [or claim 21] wherein the specificity of antibody binding to the said antigen, relative to antibody binding to the CD55 antigen as expressed on at least one of

human red blood cells [and/] or HUVEC cells, is greater for 791T/36 than for anti-CD55 antibody BRIC 216.

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A6
cont.

23. (Amended) Isolated and purified 791Tgp72 antigen according to [any one of claims 20 to 22], claim 20, as obtainable by:

- (a) solubilising 791T cells in lysis buffer including 1% octyl-B-glucoside, pH 8.5 for 1 hour at 4°C;
- (b) centrifuging the lysate at 13000 rpm x 10 min following 100,000 g x 30 min;
- (c) adding the cleared lysate to Protein A sepharose coupled to 791T/36 affinity column;
- (d) cycling the supernatant over the column at 0.3-0.4 ml/min;
- (e) washing the column with 20ml 20 mM TrisHCl pH 8.0 containing 0.3 M NaCl and 0.1% NP-40; and
- (f) eluting 791Tgp72 from the column in 5 column volumes of diethylamine pH 11.5 containing 0.5% NP-40 and neutralising the eluate with 1M Tris.

24. (Amended) A pharmaceutical composition comprising 791Tgp72 according to [any one of claims 20 to 23] claim 20 in combination with a pharmaceutically acceptable carrier.

26. (Amended) A method for isolating 791Tgp72 antigen from cells expressing 791Tgp72, the method including the steps of:

solubilising the cells with lysis buffer including octyl-glucoside; and

Sub 7
cent
treating the lysate using ultracentrifugation to
isolate said 791Tgp72 antigen.

Please cancel claims 18 and 25.

Please add the following new claims 27-32:

- sub C5
27. A cancer vaccine according to claim 2, wherein the antigen has part or all of the amino acid sequence of Fig. 10.
28. A cancer vaccine according to claim 2, wherein the antigen has part or all of the amino acid sequence consisting of amino acids 97-159 of Fig. 10.
29. A cancer vaccine according to claim 5, wherein the antigen includes a sequence having at least five amino acids identical with corresponding amino acids of a contiguous stretch of seven amino acids contained within amino acids 121-128 or 151-158 of Fig. 10.
30. A cancer vaccine according to claim 2, wherein the antigen includes a sequence having at least six amino acids identical with corresponding amino acids of a contiguous stretch of nine amino acids contained within amino acids 83-93 of Fig. 10.
- sub C6
31. A cancer vaccine comprising a nucleic acid molecule which encodes an antigen as specified in claim 2, wherein the

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Acnt
vaccine is capable of inducing an immune response in a patient.

32. A cancer vaccine according to claim 31, having part or all of a nucleic acid sequence as shown in Fig. 10 or Fig. 11.

Respectfully submitted,

Patrick J. Hagan

Patrick J. Hagan
Reg. No. 27,643
Attorney for Applicant

PJH:ksk